

[Supporting information]

Versatile Entangled Metal-Organic Frameworks Modulated by N-Donor Ligands

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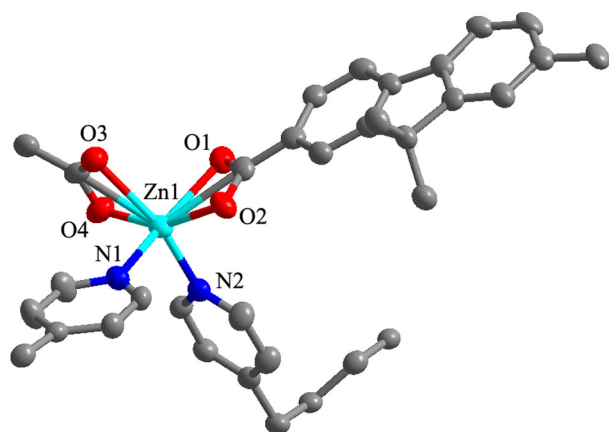


Fig S1. Molecular structure of **1** showing the coordination environment of the Zn^{2+} ions. Hydrogen atoms are omitted for clarity.

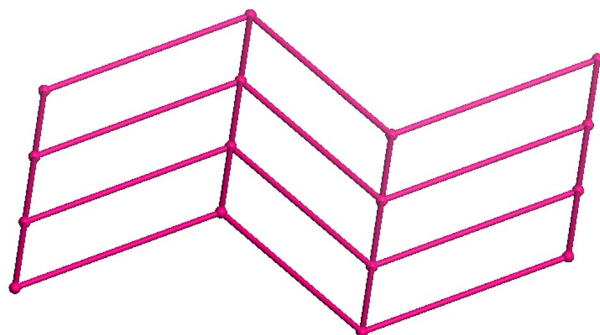


Fig S2. View of the topology of 2D (4, 4) net.

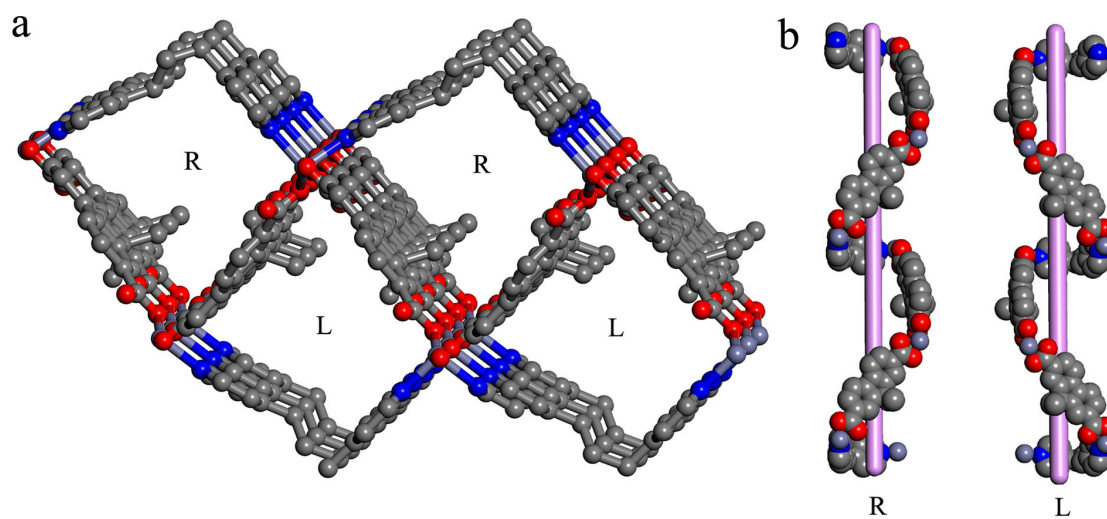


Fig. S3. (a). View of double-layered sheet assembled by A helices. (b). View of the A helix.

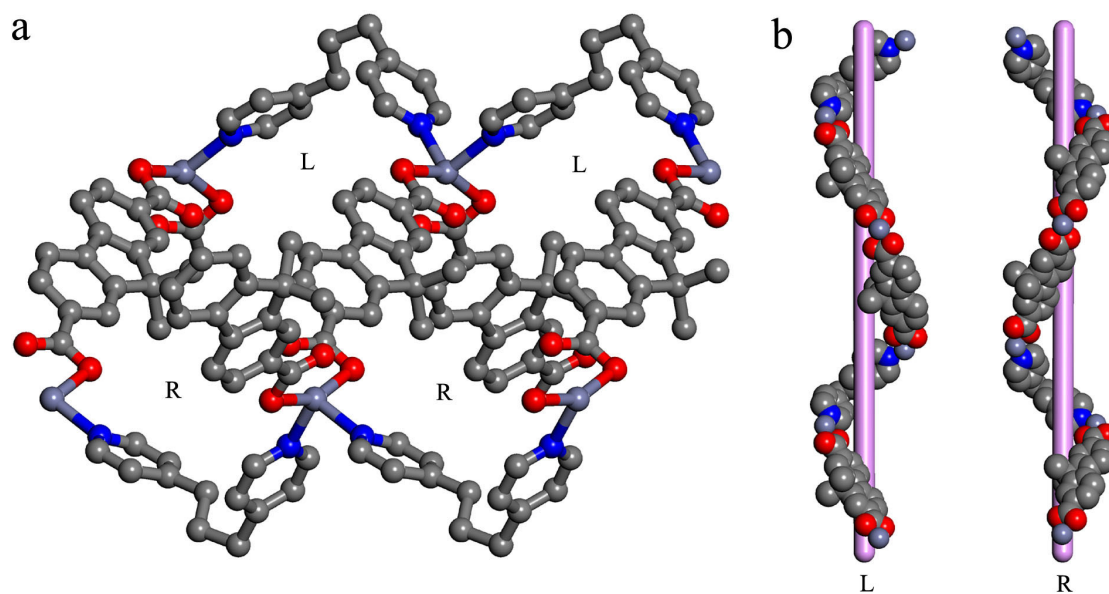


Fig. S4. (a). View of double-layered sheet assembled by **B** helices. (b). View of the **B** helix.

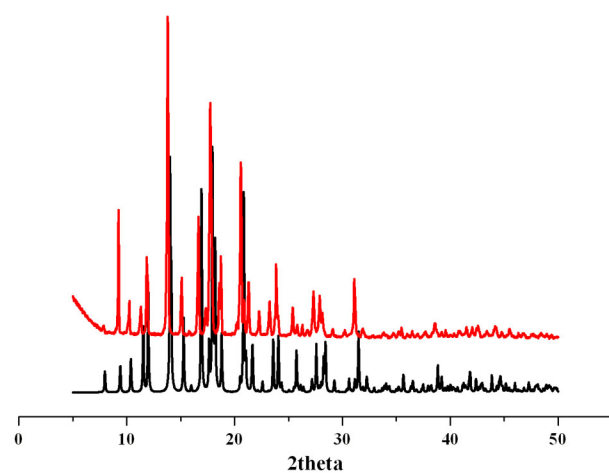


Figure S5. The simulated (black) and experimental (red) XRPD patterns for **1**.

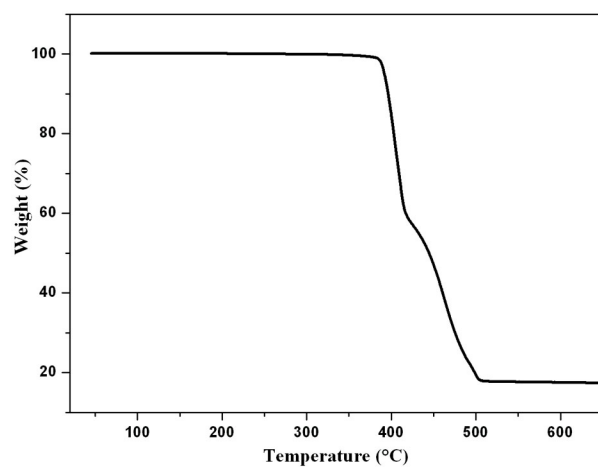


Figure S6. TGA curve of **1**.

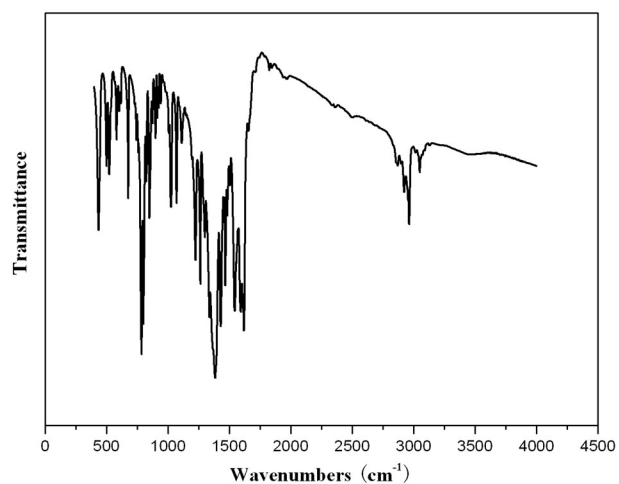


Figure S7. IR (4000-400 cm⁻¹) spectrum of the compound **1**.

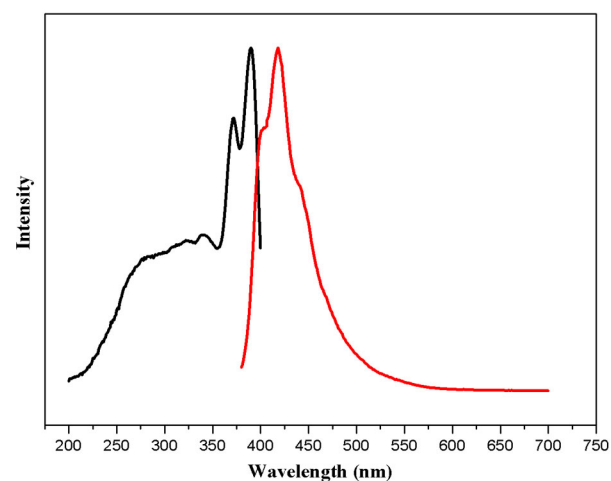


Fig. S8. Excitation (black) and emission (red) spectra of **1**. Excitation at 365 nm leads to strong blue fluorescent emission band at 417nm, which can probably be assigned to intraligand (π - π^*) fluorescent emission because almost similar emissions are observed for the free H₂MFDA.

Table S1. Selected bond distances (Å) and angles (°) for **1**.

N(1)-Zn(1)	2.114(5)
N(2)-Zn(1)	2.078(4)
O(1)-Zn(1)	2.280(4)
O(2)-Zn(1)	2.082(4)
O(3)-Zn(1)	2.341(4)
O(4)-Zn(1)	2.056(5)
O(4)-Zn(1)-N(2)	97.63(18)
O(4)-Zn(1)-O(2)	154.15(17)
N(2)-Zn(1)-O(2)	100.00(17)
O(4)-Zn(1)-N(1)	100.56(18)
N(2)-Zn(1)-N(1)	95.67(18)
O(2)-Zn(1)-N(1)	96.36(18)
O(4)-Zn(1)-O(1)	99.22(17)
N(2)-Zn(1)-O(1)	96.00(16)
O(2)-Zn(1)-O(1)	60.30(16)
N(1)-Zn(1)-O(1)	155.42(17)
O(4)-Zn(1)-O(3)	59.69(18)
N(2)-Zn(1)-O(3)	157.19(18)
O(2)-Zn(1)-O(3)	102.21(17)
N(1)-Zn(1)-O(3)	87.00(17)
O(1)-Zn(1)-O(3)	90.53(16)
